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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,215	08/31/2000	Thomas E. Saulpaugh	5181-70400	4761

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EXAMINER

CHEN, SHIN HON

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/653,215

Applicant(s)

SAULPAUGH ET AL.

Examiner

Shin-Hon Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/14/01, 8/16/01, 9/17/01, 11/1/02, 10/24/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-47 have been examined.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-7, 9-13, 16-23, 25-29, 31-39, 41-45, and 47 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Czerwinski et al “An Architecture for a Secure Service Discovery Service” (hereinafter Czerwinski).

4. As per claim 1, 17, and 33, Czerwinski discloses a method for accessing a service in a distributed computing environment, comprising: a client locating a first service within the distributed computing environment (Czerwinski: page 26 sections 3 and 3.1); the client requesting a capability credential to allow the client access to a portion of the first service's capabilities (Czerwinski: page 27 sections 3.3 and 3.4), wherein said requesting a capability credential comprises the client indicating a set of desired capabilities (Czerwinski: page 27 sections 3.3 and 3.4); the client receiving said capability credential, wherein said capability credential indicates that the client has the right to use said portion of the first service's capabilities (Czerwinski: page 27 sections 3.3 and 3.4); and the client using said capability

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credential to access one or more of said portion of the first service's capabilities (Czerwinski: page 27 sections 3.3 and 3.4).

5. As per claim 2, 18, and 34, Czerwinski discloses the method as recited in claims 1, 17, and 33 respectively. Czerwinski further discloses wherein said requesting a capability credential comprises the client sending a capability credential request message (Czerwinski: page 27 sections 3.3 and 3.4), wherein said capability credential request message comprises an identification of said first service and an indication of the set of desired capabilities (Czerwinski: page 27 sections 3.3 and 3.4).

6. As per claim 3, 19, and 35, Czerwinski discloses the method as recited in claims 2, 18, and 34 respectively. Czerwinski further discloses wherein said identification of said first service comprises a Universal Unique Identifier (UUID) (Czerwinski: page 32 section 6.1).

7. As per claim 4, 20, and 36, Czerwinski discloses the method as recited in claims 2, 18, and 34 respectively. Czerwinski further discloses wherein said capability credential request message is formatted in eXtensible Markup Language (XML) (Czerwinski: page 27 section 3.1: a client sends a query in from of an XML template; page 27 section 3.1: the client specifies certificate that it is interested, and the CA returns the certificate; page 28 section 3.4).

8. As per claim 5, 21, and 37, Czerwinski discloses the method as recited in claims 2, 18, and 34 respectively. Czerwinski further discloses the method comprising: the client receiving an

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advertisement for the first service (Czerwinski: page 26 section 3.1; page 27 section 3.3; page 28 section 3.4), wherein said advertisement describes the portion of the first service's capabilities (Czerwinski: page 26 section 3.1; page 27 section 3.3; page 28 section 3.4); and wherein said indication of the set of desired capabilities comprises an indication of said advertisement (Czerwinski: page 26 section 3.1; page 27 section 3.3; page 28 section 3.4).

9. As per claim 6, 22, and 38, Czerwinski discloses the method as recited in claims 5, 21, and 37 respectively. Czerwinski further discloses wherein said indication of said advertisement is said advertisement itself (Czerwinski: page 26 section 3.1; page 27 section 3.3; page 28 section 3.4).

10. As per claim 7, 23, and 39, Czerwinski discloses the method as recited in claims 5, 22, and 37 respectively. Czerwinski further discloses wherein said indication of said advertisement is a Uniform Resource Identifier (URI) to said advertisement (Czerwinski: page 27 section 3.1; page 28 section 3.4: a capability proves the client is on ACL by embedding the client's principal name and the service name; page 32 section 6.1: DNS and globe unique object identifier map to a service).

11. As per claim 9, 25, and 41, Czerwinski discloses the method as recited in claims 5, 21, and 37 respectively. Czerwinski further discloses wherein said advertisement is a protected advertisement that describes the first service's capabilities but does not provide an interface to the first service's capabilities (Czerwinski: page 27 section 3.2).

12. As per claim 10, 26, and 42, Czerwinski discloses the method as recited in claims 1, 17, and 33 respectively. Czerwinski further discloses the method comprising: the client receiving a protected advertisement for the first service (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4), wherein said protected advertisement indicates an address for sending said capability credential request message to (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4); and wherein said requesting a capability credential comprises the client sending a capability credential request message to said address indicated in said protected advertisement (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

13. As per claim 11, 27, 28, 43, and 44, Czerwinski discloses the method as recited in claims 10, 26, 27, 43, and 43 respectively. Czerwinski further discloses wherein said address indicated in said protected advertisement is for an authentication service (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4), wherein said sending a capability credential request message comprises sending said capability credential request message to said authentication service (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4), the method further comprising the authentication service sending a credential request response message to the client in response to said capability credential request message (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

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14. As per claim 12, Czerwinski discloses the method as recited in claim 11. Czerwinski further discloses wherein said credential request response message includes said capability credential, wherein said receiving said capability credential comprises receiving said capability credential from said authentication service in said credential request response message (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

15. As per claim 13, 29, and 45, Czerwinski discloses the method as recited in claims 1, 17, and 33 respectively. Czerwinski further discloses the method comprising: the client receiving a protected advertisement for the first service, wherein said protected advertisement indicates an authentication service; and wherein said requesting a capability credential comprises the client requesting a capability credential from said authentication service (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

16. As per claim 16, 31, and 47, Czerwinski discloses the method as recited in claims 1, 17, and 33 respectively. Czerwinski further discloses wherein said using said capability credential to access one or more of said portion of the first services capabilities comprises the client sending a message to the first service to access a first capability (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4), wherein the message includes said capability credential, the method further comprising the first service authenticating said capability credential received in the message to verify that the client has the right to use said first capability (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

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17. As per claim 32, Czerwinski discloses the method as recited in claim 17. Czerwinski further discloses said interface comprises one or more processes executable on a processor within the client device (Czerwinski: page 26 section 3.1; page 27 sections 3.2 and 3.3; page 28 section 3.4).

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 8, 24, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czerwinski in view of Vacon et al. U.S. Pat. No. 5227778 (hereinafter Vacon).

20. As per claim 8, 24, and 40, Czerwinski discloses the method as recited in claims 5, 21, and 37 respectively. Czerwinski discloses wherein said advertisement describes all of the first service's capabilities (Czerwinski: page 27 section 3.2). However, Czerwinski does not explicitly disclose wherein said indication of said advertisement in said capability credential request message in a version of said advertisement edited to describe only said set of desired capabilities. However, Vacon discloses advertisement server stores a plurality of services and the client is able to query the service by providing interested function (Vacon: column 1 line 57 – column 2 line 56). It would have been obvious to one having ordinary skill in the art at the time of



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applicant's invention to combine the teachings of Vacon within the system of Czerwinski because providing desired capability to search for services is well known in the art.

21. Claims 14, 15, 30, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czerwinski in view of Johnson et al. U.S. Pat. No. 5560008 (hereinafter Johnson).

22. As per claim 14, Czerwinski discloses the method as recited in claim 13. Czerwinski does not explicitly disclose the method further comprising: said authentication service determining a level of the first service's capabilities that the client is authorized to use; said authentication service generating said capability credential according to said level and said set of desired capabilities; and said authentication service sending said capability credential to the client, wherein said portion of the first service's capabilities that said capability credential indicates that the client has a right to use is no more than said set of desired capabilities. However, Johnson discloses generating capability credential according user's information (Johnson: column 5 line 30 – column 6 line 60). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Johnson within the system of Czerwinski because generating user credentials eliminate the need for client to go through authentication process every time a service is requested.

23. As per claim 15, 30, and 46, Czerwinski as modified discloses the method as recited in claims 14, 29, and 45 respectively. Czerwinski as modified further discloses wherein said portion of the first service's capabilities that said capability credential indicates that the client has a right

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to use is the lesser of said level of the first service's capabilities that the client is authorized to use and said set of desired capabilities (Johnson: column 5 line 30 – column 6 line 60).

***Response to Arguments***

24. Applicant's arguments filed on 11/16/04 have been fully considered but they are not persuasive.

25. As per claim 1, applicant argues that the reference does not disclose the client indicating a set of desired capabilities. However, Czerwinski discloses a client contacts the CA and specifies the principal's certificate that it is interested in (section 3.3).

26. As per claim 2, applicant argues that the reference does not disclose the credential request message comprises an identification of said first service and an indication of the set of desired capabilities. However, Czerwinski discloses the first service, which is the SDS service, and the set of desired capabilities (section 3.1 paragraph 5 and 6.1). Therefore, applicant's argument is respectfully traversed.

27. As per claim 3, applicant argues that the identification of said first service comprises a UUID. However, Czerwinski discloses that the SDS is connected to the client through ARMI, which commonly uses UUID to identify the service (section 3.1 paragraph 5 and 3.5.3).

28. As per claim 4, applicant argues that the reference does not disclose the capability credential request message is formatted in XML. However, since the SDS query is in XML format and the query contains the capabilities. Therefore, the capabilities credential request message and the credential are communicated in XML format in order to make it easier to communicate.

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29. As per claim 5, applicant argues that reference does not disclose an indication of said advertisement. However, Czerwinski discloses the advertisement domain contains the service announcements and contact information for the capability manager and certificate authority that are indication of the desired capabilities.

### *Conclusion*

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shambroom U.S. Pat. No. 6301661 discloses enhanced security for applications employing downloadable executable content.

Trostle U.S. Pat. No. 6775783 discloses client security for networked applications.

Prabandham et al. U.S. Pat. No. 6668327 discloses distributed authentication mechanisms for handling diverse authentication systems in an enterprise computer system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen  
Examiner  
Art Unit 2131

SC

*Guy J. Lamarre*  
*Primary Examiner*